

RECOGNITION of exceptional work accomplished by Albuquerque Operations and its contractors is expressed in the above letters from Brig. Gen


Alfred D. Starbird, head of the Division of Military Application, U. S. Atomic Energy Commission and K. F. Hertford, Manager of ALO of the AEC

# SAnDIA LAB news 

## Vol. 9, No. 17

## National Head Of IRE Speaks Here August 30

 John T. Henderson, national president of the Institute of Radio Engineers, will address a dinner meeting of the Albuquerque Los Alamos Section of IRE Fri day, Aug. 30. "Wide Spread Ramifications of Radio-Electronics" will be Mr. Henderson's subject. A social hour starting at $6 \mathrm{p} . \mathrm{m}$ will precede the dinner scheduled at 7. It will be held at the Kirt may be made by contacting Frank Goss (1463), ext. 2816. Member and their wives and othe
Dr. Henderson has been associated with the National Research Council, Ottawa, Canada, since 1933. He studied Engineering Physics at McGill University and received a Master of Science Degree in 1928. He then attended king's College, University of Lon1932.

## Pres. J. W. McRae

 Visits Thule Air BaseSandia Corporation, last week re urned from a trip to the Arctic with the Army Scientific Advisory Panel, of which he is a member. The journey took him to the USAF base at Thule, Greenland, and Ft. Churchill, Canada.

Also making the trip were Lt. Gen. James Gavin, assistant chief of staff for research and development of the U. S. Army, and a group of Army officers.

Albuquerque, New Mexico
August 23, 1957


## Supplier Relations Greets Visitors, Arranges Sales Talks

Dozens of representatives dia Corporation each day carryin in their sample cases items rans ing from tiny electronic tubes to specifications of giant construc tion equipment. To see that thes men meet and talk with concerned Corporation personnel is the job of Suppliers Relations Section under Chenault Davison, Procure Division 2332 Division 2332
The first Sandian supplier representatives meet is J. E. McGoorty whose warm handshake "Th to is a mutual suppliers. elping suppliers accomplish thei helping suppiers accomplish thei purpose as possible" Mr acGoorty says. The Corporation benefits by keeping abreast of the latest production, materials and processe which become available from time to time and we hope the supplie benefits by evaluating his possibil ity of providing Sandia with such materials or services."

175 Conferences
In a typical month recently Mr McGoorty arranged 175 conferences between suppliers and Corporation personnel and scheduled nine demonstartions of suppliers' prodSandians took part in the confer-

## tions.

The Suppliers Relations Section meets visitors in the lobby of Bupp. 800 and escorts them to the interviews Relations Office where then are held. The Section the arranges conferences with ing groups interested in the ma terials or services offered.
The Section keeps a log of all Sandians who meet with supplie representatives during the day and notes on subjects discussed How does the supplier represen tative feel about these services

Appreciation Letters Mr. McGoorty has a file bulg with letters of appreciation. Phrases such as thank you very much for your courtesy and coopciate your helpfulness, apsistanc and hospitality" are found in let ter after letter
A recent letter from the Thom as E, Edison Industries summed it up this way
"I would like to start by thankng you for the assistance rendered during my past visit. I can assure you that the method Sandia is using in handling of vendo representatives is superior to any system used by companies in the Southwest.'

## AEC Official Commends ALO and Contractors For Achieving Goals

Words of congratulations for work well done has been passed to the Albuquerque Operations Office of the AEC and its contractors. The praise was sent from Brig. Gen. Alfred D. Starbird, head of the AEC's Division of Military Application, to K. F. Hertford, Manager of ALO, and were passed on by Mr. Hertord J. W. McRae, Presid dia Corporation
The letters (see accompanying reproduction) pointed out the ALO and its contractors met their goals despite difficulties.
Mr . McRae, in referring to the letters said, "We recently were
advised that all the AEC production goals for the fiscal year ending June 30 had been accomplished.
"Brigadier General Alfred D. Starbird has extended his congratulations to the Albuquerque Operations Office and its contractors for this achievement and he recognized that this was the esuit of energetic, effective and forceful ef
'I wish to compliment and extend my personal appreciation to all employees of the Sandia Corporation for their part in meeting national security

Corporation Evening School Class Schedule Is Announced

Featuring electronics laboratory courses for the first time, a schedule of classes available to Sandia Corporation employees after hours is announced by General Training and Education Division 3124.

Thirteen classes for six courses will start the week beginning Monday, Sept. 16. The Sandia Corporation Evening School classes are offered at no cost to employees. Students will purchase their own textbooks. Classes will be in Bldgs. 849 and 833. A portion of Bldg. 833 has recently been converted into an electronics laboratory for student use.
Sandia Corporation works in close cooperation with the Albuquerque Public Schools in making possible presentation of needed classes by the schools in the evening. The remaining classes desired by Sandia Corporation employees are presented by the Corporation evenings on Corporation premises with Corporat instructors.

Electronics Courses
Four electronics courses will be offered beginning with an introductory course and advancing through progressively more detailed studies. Each course will have a lecture session and laboratory period and will be 12 weeks long.
Students taking a laboratory course must have completed or be taking simultaneously the corresponding lecture course.
Textbooks for all electronics lecture courses will be "Element of Electronics" by Hickey and Villines. In Laboratory I and II the text will be "Basic Electricity" by Zbar and Schildkraut while Laboratory III and IV will use "Basic Electronics" by the same authors.
In addition to the four electronics courses and laboratories, Blueprint Reading (Mechanical) and Mechanical Measurements
(Elementary) will be offered. The first is a basic nine-week course view

Mechanical Measurements Mechanical Measurements (Elementary) is a beginners course overing fundamental principles this of measuring instruments. enrollment will be limited to 24 students.
Enrollment in any of the Sandia Corporation Evening School courses can be accomplished by filling out enrollment cards which will be distributed to employees next week and returning the cards to General Training and Education Division 3124, Bldg. 849. Any questions can be answered by dialing ext. 52151.
A complete course schedule is printed on page 6 .
In addition to the Evening School program, the General Training Division is coordinating Night School and Albuquer Public cational Evenind Albuquerque Voime, place and starting date have not been set, the following sixweek courses will be offered on Tuesday and Thursday evenings at Albuquerque High School:
Typing, Shorthand, Business Arithmetic, Filing, Bookkeeping, and Business English.

Vocational School The Albuquerque Vocational Evening School will offer eight courses in Shop MathematicsArithmetic I and II, Algebra I and II, Slide Rule, Plane Geometry Plane Trigonometry and Com ing Angles. Mechered. With the xception of the Slide Rule course which is eight weeks, all classes will meet for 16 weeks.
Schedules for the above Albuquerque Schools' courses have not been completed but will be posted on bulletin boards as soon as they are made available.


NEW ELECTRONICS LABORATORY for use of Sandia Corporation students enrolling in electronics courses offered in the Cor poration Evening School is partially shown here. W. B. Maxo (left), Sandia Consultant, demonstrates to Bill Sturgis (3124)


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## Sympathy <br> To Benino and Antonio Jinzo (2473) for the death of their bro-

 ther, Max.To Alfredo Fernandez (2473) for the recent death of his wife.

To Wayne Davis (consultant to 5120) for the death of his father July 23 in Medicine Lodge, Kan.

## Former Sandia Patent

 Manager Dies Aug. 20Donald MacKenzie, who retired from Sandia Corporation Jan. 1, 1957, died in an Albuquerque hospital Aug. 20. He had served as Patent Department Manager at Sandia for four and one - half years and had
 been a Sandia consultant since Donald his retirement. He was 69 years old.
Prior to coming to Sandia he had been with Bell Telephone Laboratories for 11 years. Mr. MacKenzie was a lawyer and had earned three degrees, including a PhD from Johns Hopkins University in Baltimore.
He is survived by his widow, Margaret, Albuquerque, and two sons, Malcolm, who lives in New Jersey, and William, with the Air Force in Mississippi.

## Weddings and Engagements

Annunciation Chapel at Hoffmantown will be the scene tomorrow morning of the marriage of Hogan of Maryland.
Bridesmaids will include Mary Beth Henry (2221),
The bride is an invoice clerk and has been with the Corpora tion since January, 1956.

A recent bride was Barbara Moseley (2553) who married A/2C Robert J. Porterfield of Kirtland Methodist Church.
Barbara has been employed at Sandia since February.
The couple will be at home at 512 Cagua Drive NE following a honeymoon in northern New Mexico.

The engagement of Barbara Cooper (2541-3) to William Ernest Western, stationed at Man zano Base, was announced recent-
ly. Bernice Duke (4131) held an engagement party for her niece, Barbara, last Saturday
No date has been set for the wedding.

Don Shadel (7411) and Bonnie Schowalter of Los Alamos were married July 26 at the United Church at Los Alamos.

## Welcome Back

Organization 2711 welcomes back Edith Irwin after a lengthy ill-

Back on the job is Dick Jackson 7421) who has been confined to the hospital.


CHAMPIONSHIP TRY - CarI Cappuccilli, Albuquerque Soapbox Derby Winner, returned home this week after competing in the national contest in Akron, O. He is the son of Juene Cappuccilli (2132-2), a stenographer in Model Receiving Inspection Carl's glistening home-buil racer, shown above, won him the Albuquerque title last July.

## At Mathematics Course

Dick Hildner (5122) will be attending the mathematics summer meeting at Penn State College Aug. 26-30. The meeting is jointly sponsored by the American Mathematical Society, the Mathematics Association of America and the Society for Industrial Applied Mathematics.
The session will have a dual purpose for Dick. While at Penn State he will attend a meeting of section presidents of the Mathematics Association of America. Dick heads the section comprising Arizona, New Mexico and West Arizon

## Congratulations

Born to:
Mr. and Mrs. Bill Caudle (5144) a son, Eric W., on Aug. 7
Mr. and Mrs. M. E. Bush (5216) a son, Marvin Thomas, on Aug. 4. Mr. and Mrs. Lyle Newman 7113) a son, Cary Douglas, on Aug. 4.
Mr, and Mrs. Alvin E. Farmer (7311) a daughter, Lynn Marie, on Aug. 2
Mr. and Mrs. Jerry Foley (16113) a daughter, Shiela Ellen, on ug. 9.
Mr . and Mrs. John M. Willis (1456-1) a son, Charles Richard, on Aug. 3.
Mr . and Mrs. William Brion (1442) a son on Aug. 15.

Mr. and Mrs. Joe Costales (4153) a son, Joseph Charles, on Aug. 9. Mr. and Mrs. Carl Boxx (2131) son on Aug. 14.
Mr. and Mrs. Ed Machin (1451) a daughter, Nancy Jane, on Aug. 2. Mr. and Mrs. Ed Carpenter (7411) a son, Clint Wayne, on Aug. 7.
Mr. an
Mr. and Mrs. Irv Lenz (5221) a daughter, Lisa, on Aug. 9. Mrs. Lola Lenz formerly worked in the Corporation's medical department. Mr. and Mrs. W. P. Stearns Mr. and Mrs. Gene Newlin (6010) a daughter, Charlene on (6010) a daughter, Charlene on
Aug. 15.

Mr. and Mrs. B. N. Yates (7412) a daughter, Karin Lynn, on Aug.

Sandianotes
Vacationing Sandians Enjoy Mexico But Didn't Anticipate Earthquake

## Sailor's Reward <br> A combination of business and pleasure paid off for Paul W. Rowe

 5141).Paul recently attended a conference at Colgate University on research administration, sponsored by the American Management Association. The "off-hours" receation program during the semnar included competition in water ports.
The Sandia representative was a member of a two-man crew which won first place in the Penuin Class sailing races. His prize was a leather bound ash tray.

## New Home Owners

Proud new home owners are Mr. and Mrs. Tom C. Garcia (2711), who are now living at 2726 Santa Clara NE.
Another new home owner is Claire Abraham (5121) who moved to 3225 Palomas Dr. NE with his amily recently.
Jim Gallagher (4111-1) and his family will move into a new residence at 9625 Morrow NE soon.

## Get Well Wishes

Division 2541 extends get-well wishes to Sverre Johannesen, who has been hospitalized for several work for two months.

Magicians Elect
The International Brotherhood of Magicians recently elected Frederick H Darugh (1461-1) territorial vice president and Willard A. Scranton (1411-2) territorial epresentative
Both men hold offices in the Albuquerque Magicians Club and the Atomic City Mystics

## Wedding Anniversaries

August seems to be challenging June for honors as the most popuar month for marriage, judging from the number of wedding anni-
ersaries this month.
Mr. and Mrs. Ed Mould (2721) elebrated their 37th anniversary n Aug. 9
Last Monday Alcadio Romero hir 18th and his wife observed Bnb Dawirs (1262) and his wife Barked their 10th anniversary on Aug. 10 .

10
者 Mrs Max Wday will be Mr. and

Golf Honors
Practice paid off for John Olson 7424 ) who won a set of golf clubs ov placing first in the first flight of the medalist tournament held in Santa Fe recently

## Rooms Needed for

Summer Employees

## can you accommodate an extra

 erson in your home?Living quarters are needed by a group of Sandia Corporation summer employees who have been living in the University of New Mexico's men's dormitory during the summer. They must movs Sept. 1 to make room for returning students and hope to obtain of their Albuquerque stay at about he same rate $\$ 1$ per day Any employee $\$ 1$ per day hat could be rented to theso men may call John Shunny (3151), Ext. 36255.

Thomas A. Askew, Jr. Chief Review Branch Personnel Security
New chief of tha Review Branch Personnel S-curity Division a+ ALO is Thomas A. Askew, Jr. He recently transferred from the AEC Division of Security in WashingDill D. C. In his new position he and be in chave or review and nalysis in onnectivith personnel clearance activitios for the perations office
The post was formerly held by Miller McDonald who transferred and Per sonnel Division.

Agnes Vigil (7226) and Margaret Armijo (2461) anticipated inter-
esting sights and lovely scenery esting sights and lovely scenery South of the Border. The recent South of the Border. The recen tion.
The girls had completed their two week guided tour of Taxco, the last night of their stay they were awakened by the rain-like sound of falling plaster. Their hotel was rocking and there was a general state of confusion.
Since authorities were expecting more quakes the following day the "shook-up" girls were happy to leave for Albuquerque.


Margaret Armijo, Agnes Vigi

Going Away Party
Chester Wolowicz (7411), who is ransferring to Livermore, was und gifts friday with a cak and gifts from his fellow work

Mr. Wolowicz came to Sandia Corporation in 1950 as a draftsman. He advanced to the position of Section Supervisor and las year was promoted to supervisor of Division 7411.
He will be in charge of all drafting at the Livermore Branch.

## Welcome

Newcomers


NEW ADDITIONS to the Salton Sea Test Base staff were honored Aug. 10 with a dance at San
Community Council. Guests included ( $L$ to $\mathbf{R}$ ):
R. E. Hepplewhite (2480), Mrs. Hepplewhite, Dorothy Sehn, recreation chairman, Mrs. B. D. Neil an

Billy D. Neil (2482). The social event was well
attended by both residents and non-residents.



RECENTLY APPEAKING in national technical magazines the Sandia Corporation employment ad reproduced above aroused many favorable comments including a request for a print from a
"grown up little boy" at

## Sandia Advertisement Draws Praising Letter

## Industrial Photography

 Publishes Article byOne of Sandia Corporation's employment advertisements appearing in national magazines recently drew an unusual letter of admiration and request for a print of the ad
The letter was from M. M. Miller of the Douglas Aircraft Company, Inc., Santa Monica Division and read as follows
"Is it possible to obtain a print suitable for framing of the picture including the slogan of the 'Marshall and Gunman' appearing in your current employment advertising?
"As Chief, Acoustics Section, Engineering Department, Douglas Aircraft Company, Inc., Santa Monica, California, I appreciate the slogan; as a pistol hobbyist I like the reference to the use of guns; and as a grown up little boy I ca
ting.
"It would be a gratifying picture to hang on my wall.'
As requested, a copy of the illustration was sent to Mr. Miller for framing

## To Publish UNM Evening Schedules; 'U-Night' Sept. 16

A summary of courses offered next semester by the University of New Mexico Community Col-
lege will be published in the next issue of the Sandia Lab News. Under the provisions of the Sandia Corporation Educational Aids profunded by the Corporation to employees who successfully complete job-related University courses.
Annual University Night Annual University Night is
scheduled Monday, Sept. 16, at scheduled Monday, Sept. 16, at ficials will be on hand to counsel anyone interested in registering for UNM classes.
Staff Training and Education Division, 3123 , is coordinating with the University in arranging classes of interest to Corporation employees. Further information may obtained from W. H. Bailey, ext. 45157.

## R. D. Flaxbart Sandian Who Serves Community in Many Different Ways

This is another in a series of articles describing the community activities of Sandia Corporation employees

Between Kiwanis, Air Force Re serve and church interests it must be hard for Mrs. Flaxbart to keep track of which meeting her hus band is currently attending. R. D Flaxbart (2473) takes an active part in al

Back in 1951 "Flax" was one of the founders of the Redeemer Lu theran Church, the first church of that denomination in the Heights. Started wih about 80 member (half of them Sandians) the mem bership now numbers 350 adults
The parish house was built first then an educational building, and last month, Flax, as chairman of bids for construction of the church itself.
Several years ago he was also president of the Snow Heights Ci vic Association, organized to dea zoning and park improvements. Flax noted, "The association died a natural death after it accomplished its purpose."
Flax has been active in Kiwanis since 1942 when he helped organize a club in Illinois, his former home. After coming to Albuquerque he joined one of the existing chapters and last December helped organize the Hiland Kiwanis the only Kiwanis group in town which holds evening meetings. The club has 46 members and Flax is the president. The Hiland Kiwani


LETTER OF COMMENDATION LETTER OF COMMENDATION for Army service has been received by Bob Jones (1422-1). He had been an engineer at called up for two years duty in called up for two years duty in dia in May Bob received a letter from Col. Lloyd E. Fellenz, commanding officer of the Chemical Corps' Research and Development facility at the Army Chemicl Center, Edgewood, Md., lauding the Sandian for his "outstanding job" in development of an automatic field alarm.

## Organic Chemistry <br> Class Offered by St. Joseph's College

An evening course, Organic Chemistry 101, will be offered by the College of St. Joseph next semester. Five credit hours will be awarded students completing the course. It will meet for three hours of lectures and six hours of laboratory sessions each week. Registration information and schedule of meeting times may be obtained
5-7427.

## OSU Alumni to <br> Swim and Dine

The Alumni Club of Ohio State University plans to kick off the ocial season with a swimming party and patio supper Sept. 7 at the home of Dr. and Mrs. G. E. Rader.
Club President Ted Smart 1452) points out that member1452) points out that memberhip in the club is open to forhusbands.
Reservations for the OSU party may be made by calling Mrs. nay be made by calling Mrs

R. D. Flaxbart
work with underprivileged chil dren in the village of Tijeras Family assistance has been given eye glasses have been purchase for children whose parents cannot afford them, and supplementary milk is provided for some young sters at the A. Montoya School in Tijeras.

As if all these activities aren't enough to keep three men busy, Flax has also been in the U. S Air Force Reserve since 1946 when he left active duty. There ar training courses every two weeks and a short period of active duty every summer.

## Two Meetings of Colloquium Planned

## Sandia Corporation Research

 Colloquim will hold two meeting in the next two weeks, Craig Hudson (5511) of the Colloquium ommittee announce."Measurements of Transients in Reactors" will be discussed by Warren E. Nyer Wednesday, Aug 28. Mr. Nyer is with the Nationa Reactor Testing Station in Arco Idaho. Ticke
"P-N Junction Theory and the Junction Transistor" will be dis Junction Transistor will be dis cussed by M. J. Leivo Wednesday of physics at Oklahoma State Uni versity, Stillwater. No tickets re quired for this meeting
Both Colloquium meetings will be held at $9: 30$ a.m. in the base ment conference room of Bldg 802.


## Supervisory

## Appointments

DONALD L. HAYES to superdown Section 7122-3, Military Publication Division I. "Don" has
been with the Corporation a year and a half as a tech-
nical writer in
 organization 7120.

Before coming to Albuquerque he was with LeTourneau Westinghouse, heavy equipment construction firm in Peoria, Ill., for 15 years. He was a tech writer there for eight years, then section chief in administration, and later administrative assistant to the director of engineering.
Don majored in Mechanical Engineering at the University of Illinois and served three years in the Army Engineers during World War II in the U. S. and in Europe.

DONALD L. HARRISON to supervisor of Groups I and III
 Document Control Section $2461-4$, Docu-
ment Control Division I.
"Don" has been with Sandia Corporation for six years.
Most of the time he has been working in manufacturinging.
He studied at the University of New Mexico for two years before being employed by Sandia.

Don served three years in the Air Force as a supply sergeant.

WILLIAM H. CHANDLER to supervisor of Labor Relations Division 3221. to the corporto the Corporation in June
1951. He was 1951. He was the Industrial Relations Methods Section 4112-2 for four years prior to his transfer to Labor Relation last April.

Immediately prior to moving to Albuquerque he was a buyer for the mail order division of Montgomery Ward for five years.
Bill holds both Bachelor's and Master's degrees from the University of Texas in Industrial Relations.

During World War II he served three years in the Army, two of Pacific.
He is an affiliate of the American Institute of Industrial Engineers.

## Five Year Pins Aug. $23-29$   <br>  Androw C. Ellingson 1442, Flaviano Saavedra 2352, Harold J. Wild 2221, Mabel L. Hendricks 5125, Clifford K. Rudy 2443. 

Two Year Certificates

 Jake F. Gonzales 2154, and
5111.
Orlando Viail Aug. 30-Sept. 5


## Nation's Disabling Injuries Cause Staggering Dollar Loss

A shout of surprise and fear rang through the Tech Area re-
cently drawing the attention of cently drawing the attention of
passersby to the roof of uncompassersby to the roof of uncom-
pleted Bldg. 836. A construction worker cried out as he was slipping from a scaffold. In a moment he plunged to the ground
A group of fellow workers gathered around him and in a shor time he was hustled off in an ambulance. Later it was reported he suffered cuts, bruises and
He also had hurt his back.
Such a short lived drama sulting in a disabling injury, oc curs on the average of once every tion in time lost, medical care etc. is $\$ 11,200,000,000$ annually. This cost does not pay for the injury's initial sharp flash of agony, the pains of recovering or the oss of earning power resulting from permanent injuries. It is impossible to put a dollar sign on this cost of disabling injuries.

Staggering Sum
Costs that can be determined come to the staggering sum men tioned above- 11 billion, 200 mil lion dollars. And these costs ex tend to everyone, injured or not They result in higher prices, in creased taxes, high medica penses and loss of wages.
Consider just how much money this is:
It is equal to one year's net in

## To Repeat Lecture Series on IBM 704

Plans are being made to repeat David Karthauser (5126) on "Fortran"-the automatic coding system for IBM electronic data processing machine 704.
The first presentation of the series was for members of 5126 organization. Others in this work who are interested in hearing the lectures may call Ext. 27247 for information about a possible re-

## Cartoonist Kinney Uses Humor To Emphasize Serious

"Any Way You Look At It," a series of cartoons appearing in the pages of the Sandia Lab News retechnical ilustrator in 2463.
Being funny is in 2463.
Being funny is difficult, espe-
ially on a serious subject like secially on a serious subject like se-
curity. But the more serious the curity. But the more serious the
subject the better a laugh can emphasize a point, Cecil believes. "You have to cultivate a viewpoint," Cecil says. "Observe day-to-day happenings with the thought of injecting a humorous element. Most any situation can be enlarged to include humor. Cecil has been cultivating a cartoonist's viewpoint ever since his college days on the campus of the University of Oklahoma. He was a regular contributor of cartoons to the college paper and to "Smoke Signal," campus humor magazine. Fine Arts, graduated in degree in Fine Arts, graduated in 1950 and poration in January of the corAt Sandia Cecil has contribut d many cartoons to the Lab News and has illustrated Lab News booklets and brochures. His mos

It exceeds the total expenditure of the U. S. Navy for 1955 It would clothe every man, wom an, child in the nation for one year.
It would build $1,000,000$ new single family homes
It would build 300,000 new Class A schoolrooms.
It is enough to pay for three shots of Salk vaccine for every person in the world.
It would
hospitals.

## Indirect Costs

But even here the costs of disabling injuries do not end. Ther are indirect costs from employees stopping work out of curiosity or sympathy, to assist the injured person and to discuss the accident Supervisors must investigate the accident, arrange for the absent omployee's production to be continued by others and to select train and break in these replacement employees
Other costs arise from the low-

## Credit Union Assets

Reach \$3 Million Mark
Assets of the Sandia Laboratory
Federal Credit Union reached the Federal Credit Union reached the $\$ 3,000,000$ mark at the end of July, Manager Dale Bellamy announces. "This milestone reflects a healthy growth of the Credit Union," Mr. Bellamy said, "in no quite nine years of operation. The Credit Union was chartered in Oct., 1948, and reached the $\$ 1,000,000$ mark Aug. 31,1955 .
Growth was rapid and $\$ 2,000,000$ in assets was reached in Oct. 1956 . Membership in the Credit Union totals 5,293 Corporation employees.
"Loans amounting to a half million dollars a month are current ly being handled by the Credit Union," Mr. Bellamy reports "Nearly $\$ 10,000,000$ has been loaned since the chartering of the organization.


Cecil Kinney, 2463
recent effort was the drawings for the "Welcome to Sandia" booklet and a similar publication for the employees at Salton Sea. This orsignment technical illus
ployee and cost of material spoiled by him. Injuries frequently resul in property damage, more expense Studies have shown that injur ies result in excitement and low ered morale and these in tur cause more disabling injuries dents indirect costs of some acciwho loses his hands, the painter who loses his eyes the farmer who who loses his eyes, the farmer who losses the remainder of their lives.

## Military Service Completed by Three

Three Sandians have returned recently after service in the armed forces.
William R. Martin (1264) had been with Sandia eight month
 when he wa Army service. Afterthre months of offri-
cers' school at Fort Monmouth N. J., he wa assigned to For assistant adjutant of a signal
Mr. Martin battalion three months. Bill's wife and young son accompanied him to his post.
Another returned employee
Roscoe Champion, who had worked at Sandia two years in Specifications Division (now 7422 when he reported for Navy duty. Now, three and one-half years la ter, he is with Electrical Systems Division (1263)
Roscoe made several cruises with a naval aviation squadron including six months in the Mediterranean, and then was stationed at the Fleet Air Intelligence Training Center near Norfolk, Va buquerque with two sons to Al buquerque with two
two months old.
Another old.
land Trehearne returnee is Roalso served three and onehalf years. He had been with ation a year as an engineer in design and developmen when called in-

tour included
Mr. Trehearne
cruises to Europe,
Pacific.

## Sports Subjects Featured

In Noon Movie Program
A wide variety of black and white films will be offered the coming two weeks during the Corporation's noon movie pro gram.
Aug. 27-30 the offering will be:
"Harlem Globetrotters," "De Sea Adventure" and "Sports Car nival in Madison Square Garden Sept. 3-6 the program will include: "Communism," "Artificial Respiration" and "What Makes a Good Party."
The movies are shown in the basement conference room of Bldg. 802 on Wednesdays and Fridays and in Bldg. 849 on Tuesdays and Thursdays. All shows start at
12:10 p.m. and are free.


DEMONSTRATING the "electronic watchdog" that he and Billy Ray (5222) built, Gene Bussey (1421) shows parents Bob (2462-1) and JoAnn Ferguson how the device will start a light blinking should their daughter Beverly cry during the night. Both parents

## Electronic Watchdog Built By Sandians Helps in Rearing Child

Blonde, blue-eyed Beverly was an active healthy baby-a joy to her parents, Bob and JoAnn Ferguson. And they we conscien tlous parents. since both had impaired hearing they spent the ing the baby in case she was restless or cried during the night.
Bob in the Photo
Bob works in the Photo Section $2462-1$ as a photo printer. He
discussed his problem with the men in the Lab and as talked he got an idea. Since he and his wife got an idea. Since he and his wife flashing light rigged to an alarm clock, why not a device that would flash a light when the baby cried? He investigated the idea but He investigated the idea but found no such device in commertronics firm quoted to develop such a device was out of the question for Bob. He decided to build his own and went to the Library Section looking for information. His inquiries led him finally to Gene Bussey (1421) and Billy Ray (5222)

These two Sandians both long on electronic experience, found the idea challenging. With spare parts from their electronic hobby equipment, they put together a compact unit that did the job. It took a

Coronado Club Invites Members' Youngsters to Join Junior Bowlers

All youngsters interested in joining the Coronado Club Junior Bowling League will meet at La Cana Room at 10 a.m., Sept. 7, it was announced by Mamie Burg, AEC.

To be eligible to participate, the youngsters should be between the ages of $10-15$ and their parents must be members of the club.
A bowling movie will be shown at the meeting and the group will be formed into teams. Miss Burg is acting as team organizer and instructor for the group. The league will start bowling on Saturday morning, Sept. 14
The Coronado Club Junior Bowling League last year won the city and state junior bowling tournaments and placed high in nationa competition.
couple of hours of planning time, a test of the equipment, and a and install the unit
Little Beverly is 18 months old now. Her parents sleep nights conident that the electronic watchdog will wake

## Disaster Instruction

 Cards Distributed To Sandia EmployeesWallet-size cards listing location of Reporting Centers for Sandia Corporation personnel in the event an evacuation of Albuquerque ever becomes necessary are being distributed to all employees this week. The cards also identify emergency signals and are to be issued to all adult dependents of employees.
Distribution of the cards is part of a Defense and Disaster Plan or evacuation and reassembly of Sandia employees and their families. Reporting Centers have been established at Gallup, Socorro, aining munications equipment to speed the task of getting almost 7,000 employees in touch with their amilies.
By reporting to the centers, contact can be made with employees after Albuquerque has ponsibility of each individual to eport his or her location to a Personnel Reporting Center in order that information concerning the Corporation's plans to resume operations can be disseminated to 11 employees.
Distribution of the cards will be within Departments. If an additional supply of cards is needed, more can be obtained from Employee Services 3122 .
The Defense and Disaster Plans are being developed into a comprehensive program providing for adequate alert signals, practical vacuation procedures and the reassembling of families and the assigning of employees to work locations for carrying on the work
of the Corporation.

## Scientific Authors

## Sandia Employees' Technical Papers Read, Heard by Extensive Audience

Sandia Corporation scientists have been prolific authors recently with the publication
"Environmental Testing of Sol derless Connectors," by J. A. Barber (1611) published by the Of fice of Technical Services, Depart ment of Commerc

Applying Flexible Printed Circuits in Electronic Equipment De sign" by George Voida (1416) pub lished in July issue of Machine Design.
"Critical Survey of the General Limitations of the Nondestructive Testing Field" by D. W. Ballard (1624) in the July-August issue of The Journal of the Society for Nondestructive Testing.
"The Effects of Reflections from Randomly Spaced Discontinuities in Transmission Lines" by R. K. Moore, Sandia Consultant, in IRE Transactions on Microwave Theory and Techniques, April issue. "A Precision Short-Length Wire Cutter" by J. A. Price and P. L. Kerley (both of 1413) in the July issue of Electronic Industries and Tele-Tech.
"The Trifilar Pendulum and Its Application to the Experimental Determination of Moments of Inertia" by G. W. Hughes (1215) published by the American Society of Mechanical Engineers, March
25 .
Other Sandia authors will pre-

## Former Dorsey Band To Be At Club; Full Social Program Next Two Weeks

The late Jimmy Dorsey's orchestra, now conducted by Lee at the Coronado Club next month. Tickets will go on sale to members Tuesday, Sept. 3.

The group will appear at the club from 8 to 12 Friday night. Sept. 13. Tickets for guest admission will go on sale Sept. 9. Cost to members will be $\$ 2$ plus tax, $\$ 3$ plus tax for guests
Events for the next two weeks include a Social Hour tonight featuring the music of Jim Wilson and his combo, followed by an informal dance tomorrow night
from 9 to 1 with Ray Giles and
his orchestra. Admission to the dance is 50 cents per member, $\$ 1$ plus tax per guest.
The Family Night movie Sunday stars Susan Ball, Victor Mature and John Lund in "Chief Crazy Horse, the saga of the sloux leader who defeated Custer in battle.
An informal dance Saturday, Aug. 31, offers the music of Leigh Sprague and his orchestra.
A new event, starting the first week of September, is a Cribbage Nite beginning at $7 \mathrm{p} . \mathrm{m}$. every other Wednesday. Admission is 50
cents a person.

New Weapon Effects Book Now in Library
Sandia Corporation's Technical Library has on hand for general circulation two copies of "The Effects of Nuclear Weapons," pubished by the AEC.
The book, edited by Samuel Glasstone, supersedes a previous publication, "The Effects of Atomic Weapons."
Personal copies of the new book may be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at $\$ 2$ a copy.

## Women Bowlers

Invited to Join Jewelette League
Women interested in becoming members of the Ladies Jewelette Bowling League are invited to attend an organization meeting at the Coronado Club, Tuesday, Sept. 3 at 7:30 p.m.
According to club secretary Lilian McCullar, league play will get underway Sept. 10 with play very Tuesday
Only members of the Coronado Club can use the club's bowling acilities
For additional information cal
Mrs. McCullar at Alb. 9-0638

## 1400 Sews Up Top Spot in Softball League With 23-7 Victory Over 2500

Team 1400 clinched the championship of the Sandia Employees Softball Association last week by defeating 2500 23-7.
All question of the outcome of the game was settled as early as Gene Glaze started an onslaught Gene Glaze started an onslaught when a double by Victor Sirwinsk brought in three runs.
In the sixth inning slugger SirBefore the inning ended 7 bor standings

runs were in for 1400. League rec ord for 1400 was 14 won and two lost. In second place was 1200 with 13 won and 3 lost. Four teams tied for third place - $2100,3100,7400$ and AEC

A single elimination tournament is underway this week with 1400 the favored team. Semifinals will Diamond B with games starting at $6: 45$ and $8: 30 \mathrm{pm}$. Final game for the tournament championship is scheduled Wednesday, Aug. 28, at 7 p.m. on Diamond B.

## Teenage Cotillion For Base Dependents Scheduled Sept. 3

A Teenage Cotillion sponsored by the Sandia Base Women's Club is scheduled Tuesday, Sept. 3 from Officer's Club. The Sandia Bas dents of Corporation employees residing on Sandia Base or Wherry Housing and dependents of the Sandia Base Women's Club mem bers are among those invited to attend.

The Cotillion will feature dancing and buffet refreshments. Admission will be 50 cents per person. Reservations may be made by ext. 32271 Mr. W. S. Hutchinson, Alb. 6-7533.


CHAMPIONSHIP TEAM of the Sandia Employees Gene Glaze, Lee Hogue, Joe Bradshaw and Art Softball Association is 1400 shown here in a vic- McMullen, manager. Standing are Chet Clyde, tory pose after beating 2500 23-7 last week. In the Charlie Blain, Bruce Johnson, Vic Sirwinski,
first row ( L to R) are Ken Gillespie, Leo White, Dean Yearout, Leland Allen and Frank Daut.

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|  |  |  | roll-a-way bed, mattress, $\$ 20$. Anaya, <br> 2 BR. HOME, near bases, special for one | TO TRADE FWo 1 , h.p. motors tor one $1 / 2$ BABY CAAEE in mi home doys oge six |
|  |  | MOTOR SCOOTER, new motor, S100. Bu- |  |  |
|  |  | SOFA AND CAARI, , Llue dares, St55: Wur- <br>  |  <br> toliting occordion door |  |
|  |  |  | can Phyfe, $36 \times 50$, $\$ 20$; blond dinette table, $36 \times 40$, w/eaf, matching chairs, $\$ 30$. Newman, Alb, $6-3295$. | GARAGE for staraoe of houschold belong. <br>  <br> To TRADE Coldsoot fertigearoto large, |
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|  |  |  |  1408 Alvorato Ne. |  |
|  |  | AT-1. 35 WATT XMTR, $515 ; 522$ VHF XMTR, SS: 3480 receiver with internol | 408 Alvarado NE $\qquad$ <br>  | FOR RENT |
|  |  |  |  |  S40 menth Akkingo, Alb, $5-4570$. |
|  |  |  <br>  | 24". BICYCLE, girits, S12. Moncuso, ALb. <br>  |  space: renter |
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|  |  | new, soi chinchlus moted port, yound <br> AB. $5-7924$ ofter 5 |  |  |
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# Giant Rubber Bands Snap New 'Slingshot' Accelerator 

A giant device utilizing the hot is the newest environmental test facility in Sandia Corporation's Area III.
The instrument will duplicate shocks and accelerations a nuclear weapon might undergo in a plane during catapault launching, arrested landings on an aircraft carrier, during strenuous and severe flight conditions, or shocks inherent in transportation and handling.
The Shock Cord Accelerator known as the "Slingshot" by its

## Issue Caution

On Discussion Of News Articles

Sandia Corporation employees are being cautioned to avoid discussion of newspaper articles which might involve classified inormation.
From time to time information appears in newspapers which employees recognize as relating to Sandia operations and which may not have been released through fricial channels. In such cases, Sandia Corporation securty Derain from discussing the article question with people outside of the project until official verificaion of the information and its re leasability is received.
It is contrary to AEC policy to either confirm or deny published reports of unofficial or speculative nature which might involve classified information.
Publication of information previously classified does not constiute "declassification" of the material and should not be regarded as justification for down-grading the classification of official documents pertaining to the activity in question.

## Hospital Insurance

## Plan Approaching

## Good Financial Basis

Equitable Life Assurance Company, Sandia Corporation Hospitalization - Surgical Insurance Plan carrier, recently announced hat for the policy year ended amounted to $\$ 381,169.08$. Claims paid totaled 89.1 per cent of the amount taken in, or $\$ 339,317.28$.
Last year, when the $\$ 35$ deduct-
ble feature was not in effect, claims payments were 106.8 per cent of the amount received by the Insurance Company in premiums. The new figures indicate that the Hospitalization Plan is approaching a healthy financial condition as a result of the $\$ 35$ deductible feature.
The difference between claims paid and premiums received is divided between operating and adlegally required reserve funds.

## Four Sandia Scientists <br> Finish Assignments at Research Institute

Four Sandia Corporation scientists (all 5133) recently returned from assignments at Stanford Research Institute, Palo Alto, Calif., where they directed studies in heretion effects research with SRI personnel
Irving Auerbach directed work in the radiation of polyners by electrons from a resonant transormer source and gamma rays from SRI 10 kilocurie cobalt source.
Herman Stein and Dick Berner were initiating investigations in the effects of radiations on semiconducting materials.
Asher Kantz was directing neutron bombardments utilizing a 2 Mev Van de Graaff accelerator.
Work on various solid state maWork on various solid state ma-
terials was initiated.
designers, was put through its perormance paces this month under the direction of project engineers R. L. Ault (1612) and H. D. Sivinsky (1613). Actual testing of weapons will begin shortly according to Max McWhirter, leader of Dynamic Test Section A, 1612-1. Re sponsibility of designing and developing the Slingshot was shared by this section and Design Section B, 1613-2, under M. R. Madsen.

Force 480,000 Lbs.
The principle of a slingshot, including the stretching of rubber bands for power, is used in the new facility. One thousand shock cord loops, actually compressed elastic bands wrapped with cotton braiding, will supply up to 480,000 lbs. of force and generate accelerations up to 54 times the pull of gravity. The shock cord loops are $5 / 8$ inch in diameter and are 20 ft long.
Hydraulic cylinders utilizing the pumps from the nearby Centrifuge installation 'supply the means of stretching the shock cords. The cylinders are attached to a pusher beam which in turn is attached to the shock cords. Resting on a 120 ft . track and in contact with the pusher beam is the cart which carries the test unit. When the pusher beam is released with an explosive actuated release mechanism, the cart shoots down the track.

Electric Brakes
Electric brakes in a cable drum stop the cart while the pusher eam slams into a stop mechanism mechanism is movable and its position on the track controls the duration of tests.
The building which houses the "Slingshot" is partially underground, constructed of steel and reinforced concrete and includes several levels for the facility and access areas. Giant doors on the south end of the facility open during a test, since the rails of the track run almost the entire length of the building plus 40 feet beyond.
Also instrumental in the design, fabrication and proof-testing of the facility have been R. L. Hager L. P. Navoda, R. F. Harlan, H. J Blechinger, W. C. Clark and B. W Duggin (all of 1612); M. O. Jones and W. T. Owens (1613); and K V. Atkisson (7412)


FINAL INSPECTION of the new "Slingshot" test installation is performed by ( $\mathbf{L}$ to $\mathbf{R}$ ) M. R. Madsen (1613-2), Bill Owens (1613-4) and Max McWhirter (1612-1), Max is sitting on the cart that would con
tain the test unit. In the pit is the pusher beam which stretches the shock cords. The cords are mounted inside the structural walls on each side of the pit and are not visible in this photo.


TWO BANKS of shock cords supply the power for acceleration tests in the new "Slingshot" test in-
stallation in Area III. Operator Bill Owens (1613-4) adjusts the ring bolts where the test unit will ride.

## Sandia Corporation Evening School Schedule

## COURSE

Blueprint Reading, Mechanical Sec. A Blueprint Reading, Mechanical Sec. B Mechanical Measurements, Elementary*

Electronics I Sec. A (Lecture) lectronies I Sec. B (Lecture) Electronics I* Sec. A (Laboratory) Electronics I* Sec. B (Laboratory) Electronics I* Sec. B (Laboratory Electronics I* Sec. A (Lecture-Lab Combination)
Electronics II Sec. A (Lecture) Electronics II Sec. B (Lecture) Electronics II Sec. C (Lecture) Electronics II* ${ }^{*}$ Sec. B (Laboratory)

## Electronics II Sec. A (Lecture-Lab

Combination)
Electronics III Sec. A (Lecture)
Electronics III* Sec. A (Laboratory) Electronics III* Sec. B (Laboratory)

DAY TIME
Monday-7-8:30 Monday-4:45-6:15 Wednesday-7-9
Tuesday-4:45-6:45 Thursday-7-9 Monday - $4: 45-6$ Tuesday-7-9 Wednesday-7-9

Saturday-8-12:15 Monday-4:45-6:45 Tuesday-7-9 Wednesday-7-9 Tuesday-4:45-6:45 Thursday-4:45-6:45

BLDG. RM.

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INSTRUCTOR
W. V. McGuire (7412
A. Russell (7412)
K. R. Dickerson (3124)

| Saturday-8-12:15 | 849 | 3 | L. D. Watkins (5242) |
| :--- | :--- | :--- | :--- |
| Thursday-4:45-6:45 | 849 | 3 | N. A. Cordova (2131) | $\begin{array}{lll}849 & 3 & \text { R. L. Davis (1452) } \\ 8 & \text { R. A. Mikkelson (7111) }\end{array}$ R. A. Mikkelson (7111) R. L. Davis (1452)

C. W. Allen (7113) C. W. Allen (7113)
F. I. Magee (7113)
C. R. Blaine (1456)

Thursday-4:45-6:45
R. T. West (1215)
M. A. Elich (7113)
L. R. Ptacek (1452)
B. Johnson (1611)
L. R. Ptacek (1452)

## PREREQUISITES

Arithmetic through fractions and decimals
Arithmetic through fractions and decimals None None Previous or concurrent enrollment in Electronics I Lecture

Monday-7-9
Wednesday-4:45-6:45
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Electronics IV Sec. A (Lecture)
Monday -7-9 N. A. Cordova (2131)

Electronics IV* Sec. A (Laboratory)

Knowledge of subjects covered in Electronics I

Previous or concurrent enrollment in Electronics I Lecture

Knowledge of subjects covered in Electronics II Previous or concurrent enrollment in Electronics III Lecture
Knowledge of subjects covered in Electronics III Previous or concurrent enrollment in Electronics IV Lecture

* Enrollment limited to 24

